



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/588,107	07/31/2006	Ken'ichi Kasazumi	28951.1182	4328	
53/067	7590	06/19/2009			
STEPTOE & JOHNSON LLP 1330 CONNECTICUT AVE., NW WASHINGTON, DC 20036				EXAMINER AMARL ALESSANDRO V	
ART UNIT 2872		PAPER NUMBER PAPER			
MAIL DATE 06/19/2009		DELIVERY MODE PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,107	Applicant(s) KASAZUMI ET AL.
	Examiner ALESSANDRO AMARI	Art Unit 2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 April 2009.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
 4a) Of the above claim(s) 9,10 and 12-18 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-8 and 11 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 01 April 2009 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Drawings

1. The replacement drawings for Figures 13 and 14 were received on 01 April 2009. These drawings are accepted.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi US 2003/0189742.

In regard to claim 1, Kobayashi discloses (see Figs. 1-3) a light source device comprising: at least two coherent light sources (106a, 106b, 106c) as described in paragraph [0042]; and a diffraction part (110) for diffracting lights emitted from the coherent light sources, such that the lights propagate through the same optical path as shown in Figure 1; wherein the lights having different incident angles upon contacting the diffraction part, and the diffraction part is for receiving the lights having different incident angles and outputting a coaxial beam comprising said lights as shown in Figures 2 and 3 and as described in paragraphs [0036] – [0046].

Regarding claim 2, Kobayashi discloses that the optical propagation paths of the respective lights emitted from the at least two coherent light sources overlap each other on the diffraction part as shown in Figure 2.

Regarding claim 3, Kobayashi discloses that the center axes of the optical propagation paths of the respective lights emitted from the at least two coherent light sources intersect at one point on the diffraction part as shown in Figure 2.

Regarding claim 4, Kobayashi discloses that the at least two coherent light sources are disposed on the same submount as shown in Figures 1 and 2.

Regarding claim 5, Kobayashi discloses that the coherent light sources are a coherent light source that emits red light, a coherent light source that emits blue light, and a coherent light source that emits green light as described in paragraph [0042].

Regarding claim 6, Kobayashi discloses that the light emitted from at least one coherent light source among the coherent light sources passes through the diffraction part without being diffracted by the diffraction part as shown in Figure 2.

Regarding claim 7, Kobayashi discloses that said diffraction part comprises a single diffraction element (110a), and said diffraction element diffracts the light emitted from at least one coherent light source so that the respective lights emitted from the at least two coherent light sources propagate through the same optical path as shown in Figures 1 and 2.

Regarding claim 8, Kobayashi discloses that said diffraction element is further provided with a lens function (i.e., converging and collimating light) as shown in Figure 2.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi US 2003/0189742.

Regarding claim 11, Kobayashi discloses the invention as set forth above but does not teach that said diffraction element is a volume hologram, and plural gratings are multiplexed on the volume hologram, which gratings receive the respective lights emitted from the at least two coherent light sources, and change the propagation directions of the respective lights. It is notoriously well known in the holographic art to utilize volume holograms with multiplexed gratings to achieve the predictable result of better Bragg selectivity. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a volume hologram with multiplexed gratings for the light device of Kobayashi in order to provide for better Bragg selectivity and thus more control of propagation directions for the light source device.

Response to Arguments

6. Applicant's arguments with respect to claims 1-8 and 11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALESSANDRO AMARI whose telephone number is (571)272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ava
17 June 2009

/Alessandro Amari/
Primary Examiner, Art Unit 2872